***Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ P: \_\_\_\_\_\_\_***

HW #29

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| 1. A square has sides that are the same length as the radius of a circle. If the circle has an area of 36π square units, how many units long is the perimeter of the square? | |
|  | 3) A square and a semicircular region have the same perimeter. If the length of the radius of the semicircular region is 16, what is the length of one side of the square |
| 4) An 8-foot-by-4-foot garden space is increased by 3 times. If the 8-foot side is increased by 4 feet, how many feet must the 4-foot side have been increased? | 5)Given *m*∠*QST* = 135°, find *m*∠*QSR.* |
| 6) Given *m*∠*ABC* = 94°, find *m*∠*CBD* | 1. A rectangle has an area of 60 meters, and a width of 4 meters. What is the perimeter of the rectangle? |
| 1. The perimeter of a rectangle is 64 feet. The width of the rectangle is half as long as its length. Find the length and width of the rectangle. | |

***GRASP PROBLEMS: Please GRASP both problems on separate sheets of paper***

Which of the following expresses the distance covered by a horse moving around a circular merry-go-round after 5 laps if the horse is 10 feet away from the center of revolution?

A swimming pool is to be built on an 8 foot by 8 foot square lawn. If the swimming pool must be at least 2 feet away from any edge of the lawn, what is the least possible amount of lawn area that will remain after the pool is built?